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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,170	11/17/2003	Kamal Jain	MS302151.1/MSFTP489US	4120

  

27195	7590	11/03/2008
AMIN, TUROCY & CALVIN, LLP		
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EXAMINER	
KARDOS, NEIL R	

  

ART UNIT	PAPER NUMBER
3623	

  

NOTIFICATION DATE	DELIVERY MODE
11/03/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket1@thepatentattorneys.com  
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## **DETAILED ACTION**

### ***Requirement for Information Under 37 C.F.R. 1.105***

1. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.
2. The information is required to properly examine the claimed invention in the instant application of providing a solution to a linear program.

In response to this requirement, please provide the result of any search made by the applicants in preparing the application.

In response to this requirement, please provide the citation and a copy of each publication which any of the applicants authored or co-authored and which describe the disclosed subject matter.

**In response to this requirement, please provide information regarding whether this invention is an improvement over the prior art and what improvement is being provided.**

In response to this requirement, please provide the citation and copy of each publication that is a source used for the description of the prior art in the disclosure.

In response to this requirement, please provide the citation and a copy of each publication that any of the applicants relied upon to develop the disclosed subject matter that describes the applicant's invention. For each publication, please provide a concise explanation of the reliance placed on that publication in the development of the disclosed subject matter.

In response to this requirement, please provide the citation and a copy of each publication that any of the applicants relied upon to draft the claimed subject matter. For each publication, please provide a concise explanation of the reliance placed on that publication in distinguishing the claimed subject matter from the prior art.

In response to this requirement, please provide the names of any products or services that have incorporated the claimed subject matter.

The examiner notes that throughout the specification, several references are made to other works in the prior art. In response to this requirement, please provide a copy of each of these references. The references cited throughout the specification include:

- A. Martin and R. Weistmantel; Packing Paths and Steiner Trees: Routing of Electronic Circuits; CWI Quarterly; 6:185-204; 1993.
- M. Grotschel, A. Martin, and R. Weistmantel; The Steiner Tree Packing Problem in VLSI-Design; Mathematical Programming; 78:265-281; 1997.

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- M. Grotschel, A. Martin, and R. Weismantel; Packing Steiner Trees: A Cutting Plane Algorithm and Computational Results; Mathematical Programming; 72:125-145; 1996.
- K. Menger. Zur Allgemeinen Kurventheorie; Fund. Math.; 10:95-115; 1927.
- C. St. J. A. Nash-Williams; Edge Disjoint Spanning Trees of Finite Graphs; J Lond Math. Soc.; 36:445-450; 1961.
- W. T. Tutte; On the Problem of Decomposing a Graph into  $n$  Connected Factors; J Lond Math. Soc.; 36:221-230; 1961.
- P. M. Vaidya; Geometry Helps in Matching; SIAM J Comput.; 18:1201-1225; 1989.
- B. Carr and S. Vempala; Randomized Meta-Rounding; Proc. Of the 32<sup>nd</sup> ACM Symposium on the Theory of Computing (STOC '00); 2000).
- S. Hougardy and H. J. Promel; A 1.598 Approximation Algorithm for the Steiner Problem in Graphs; Proc. Of 10<sup>th</sup> ACM-SIAM Symp. On Disc. Alg. (SODA); pages 448-453, 1999.
- M. Bern and P. Plassmann; The Steiner Problem With Edge Lengths 1 And 2; Information Processing Letters; 32(4): 171-176; 1989.
- J. Bang-Jensen, A. Frank, and B. Jackson; Preserving And Increasing Local Edge-Connectivity In Mixed Graphs; SIAM J. Discrete Math.; 8(2):155-178; 1995.

3. The fee and certification requirements of 37 C.F.R. 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the

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scope of this requirement under 37 C.F.R. 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 C.F.R. 1.105 are subject to the fee and certification requirements of 37 C.F.R. 1.97.

4. In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.

5. The applicant is reminded that the reply to this requirement **must be made with candor and good faith** under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete response to the requirement for that item.

6. This requirement is subject to the provisions of 37 C.F.R. 1.134, 1.135 and 1.136 and has a shortened statutory period of 2 months. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

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*Conclusion*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R Kardos whose telephone number is 571-270-3443. The examiner can normally be reached on Monday-Friday, from 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on 571-272-6737. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Neil R. Kardos  
Examiner  
Art Unit 3623

NRK  
10/20/08

*BW Boswell*  
Beth Boswell  
Supervisor, AU 3623